KO24316

# 510(k) Summary

## 1.0 Date Prepared

January 2, 2003

## 2.0 Submitter (Contact)

Martin D. Sargent Regulatory Affairs Manager Medtronic Xomed Jacksonville, FL (904) 279-7586

#### 3.0 Device Name

Proprietary Name:

NIM PRS (The tradename has not been finalized at this time)

Common Name(s):

Nerve Integrity Monitor, Intraoperative Electromyographic

(EMG) Monitor, Nerve locator / stimulator

Classification Name(s):

Nerve locator / stimulator, Electromyographic (EMG) Monitor

#### 4.0 Device Classification

Classification Name:

Nerve locator / stimulator, Electromyographic (EMG) Monitor

Procode 77ETN

Class II

21 CFR § 874.1820

Procode 89IKN

Class II

21 CFR § 890.1375

#### 5.0 Device Description

NIM PRS is a multi-channel intraoperative neurophysiological monitor capable of connecting various styles of patient monitoring electrodes and supplying electrical stimulus for evoked responses. The monitoring console uses both video and audio output to alert the user of EMG responses during a surgical procedure. EMG responses monitored with the device may originate from operator applied electrical stimulus or from direct or indirect mechanical stimulus occurring during the course of the surgery. Acquired data may be stored on various types of durable media, and hard copy may be obtained via an optional printer.

#### 6.0 Indications for Use

This device is indicated for use in surgical procedures for patient-connected intraoperative nerve monitoring, i.e. assisting the surgeon in locating and mapping motor nerves through the use of electromyographic (EMG) signals and electrical stimulus of nerves.

# 510(k) Summary (continued)

# 7.0 Substantial Equivalence

The basic instrumentation, design, technology, system features, functions, and the principle of operation of the NIM-PRS are substantially equivalent to the Medtronic Xomed NIM-4 (K982595).

| Characteristic   | NIM-4 (K982595)<br>(Tradename NIM-Response) | NIM-PRS<br>(Proposed device)                               |
|--|---|--|
| Multi-channel intraoperative neurophysiological monitor  | Yes<br>(4 channels)                         | Yes (8 channels)   |
| Indicated for use in surgical procedures for patient-connected intraoperative nerve monitoring, i.e. assisting the surgeon in locating and mapping motor nerves through the use of electromyographic (EMG) signals and electrical stimulus of nerves | Yes   | Yes  |
| Complies with IEC 60601-1 electrical safety standards  | Yes   | Yes  |
| Capable of connecting various styles of patient monitoring electrodes  | Yes   | Yes  |
| Capable of supplying electrical stimulus for evoked responses  | Yes<br>(1 stimulator 0 - 3 mA)              | Yes<br>(2 stimulators 0 - 30 mA and<br>0 - 120 mA)         |
| Capable of connecting various styles of patient stimulating electrodes   | Yes   | Yes  |
| Uses both video and audio output<br>to alert the user of EMG responses<br>during a surgical procedure  | Yes   | Yes  |
| Monitors EMG responses originating from operator applied electrical stimulus   | Yes   | Yes  |
| Monitors EMG responses originating from direct or indirect mechanical stimulus   | Yes   | Yes  |
| Acquired data may be printed on hard copy via an optional printer  | Yes   | Yes (May also be stored on various types of durable media) |



JAN 0 6 2003

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Medtronic Xomed c/o Robert Mosenkis CITECH 5200 Butler Pike Plymouth Meeting, PA 19462-1298

Re: K024316

Trade/Device Name: NIM-PRS

Regulation Number: 21 CFR 874.1820; 21CFR890.1375

Regulation Name: Stimulator, Nerve; Electromyograph, Diagnostic

Regulatory Class: Class II Product Code: ETN; IKN Dated: December 24, 2002 Received: December 26, 2002

Dear Mr. Mosenkis:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set

## Page 2 – Robert Mosenkis

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050. This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4692. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/dsma/dsmamain.html">http://www.fda.gov/cdrh/dsma/dsmamain.html</a>

Sincerely yours,

A. Ralph Rosenthal, M.D.

Director

Division of Ophthalmic and Ear, Nose and Throat Devices

Office of Device Evaluation

Center for Devices and Radiological Health

| 510(k) Number (if known): 10024316<br>Device Name: NIM PRS<br>Indications for Use:   |                    |  |
|--|--------------------|--|
| This device is indicated for use in surgical procedures for patient-connected intraoperative nerve monitoring, i.e. assisting the surgeon in locating and mapping motor nerves through the use of electromyographic (EMG) signals and electrical stimulus of nerves. |                    |  |
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| (Division Sign-Off)  | - 1007             |  |
| Division of Ophthalmic Nose and Throat Devis   | <b>35</b>          |  |
| 510(k) Number <u> </u>   | 24316              |  |
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| Prescription Use 7 Or Over-the-Counter Use (Per 21 CFR 801.109)  |                    |  |
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